ORIGINAL PAPER

PREFERENCES AND BUYING BEHAVIOUR OF BEEF CONSUMERS IN TUSCANY

PREFERNCIJE I KUPOVNO PONAŠANJE POTROŠAČA GOVEDINE U TOSKANI

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ABSTRACT

Tuscany, probably the most famous Italian region, is known because of many typical food specialities. One of them is the “fiorentina” - a thick, first quality beef, called after the name of the city of Florence. However, recent trends in consumers’ behaviour and the BSE crisis have affected the attitude of consumers toward such products. In this study are presented the results of a mail survey about beef consumption and preferences that was conducted in Tuscany in May 2002. The survey showed that, despite recent food scares and new consumption behaviour, Tuscany consumers still like and prefer beef that has guarantees of quality. Therefore, there are good market opportunities for the Italian and foreign beef producers in Tuscany if they will provide consumers with not only good quality beef, but also more information about the meat.

KEY WORDS: beef, consumer, survey, Tuscany

SAŽETAK

Toskana, vjerojatno najpoznatija talijanska regija je poznata po svojim prehrambenim specijalitetima. Jedan od njih je i “fiorentina” – deblji goveđi odrezak prve klase koji je dobio ime po gradu Firenci. Međutim, noviji trendovi u ponašanju potrošača i pojava kravljeg ludila su utjecali na stavove potrošača prema takvim proizvodima. U ovom radu su prikazani rezultati anketnog istraživanja o potrošnji govedine koje je provedeno u Toskani u svibnju 2002. godine. Rezultati istraživanja su pokazali da potrošači u Toskani još uvijek vole i preferiraju govedinu usprkos nedavnim prehrambenih skandalima i promjenjenim trendovima u potrošnji. To ukazuje da u Toskani postoje dobre prodajne mogućnosti za talijanske ali i inozemne proizvođače govedine, posebice ako nude kvalitetnu govedinu i više informacija o mesu koje prodaju.

KLJUČNE RIJEČI: govedina, potrošači, anketno ispitivanje, Toskana

DETALJAN SAŽETAK

Toskana, vjerojatno najpoznatija talijanska regija je poznata po svojim prehrambenim specijalitetima. Jedan od njih je i "fiorentina" – deblji goveđi odrezak prve klase koji je dobio ime po gradu Firenci. Međutim, noviji trendovi u ponašanju potrošača i pojava kravljeg ludila su utjecali na stavove potrošača prema takvim proizvodima. U ovom radu su prikazani rezultati istraživanja o potrošnji govedine u Toskani.

Istraživanje je provedeno u dva koraka. U prvom koraku su provedena tri grupna intervjua u svibnju 2002. godine u Bolonji s 24 ispitanika različitog spola, dobi i obrazovanja. Cilj grupnog intervjua je bio da se utvrde stavovi potrošača prema hrani, prema potrošnji mesa i posebice stavovi prema govedini. Rezultati grupnog intervjua su korišteni za sastavljanje anketne upitnice. U drugom koraku ispitivanja je provedeno anketno istraživanje pomoću anketna upitnica koja se sastojala od nekoliko skupina pitanja. Prvu skupinu pitanja su činila pitanja o ponašanju u kupnji i potrošnji mesa, posebice govedine; zatim su slijedila pitanja o važnosti pojedinih obilježja pri kupnji govedine mjerena na likertovoj skali od 5 stupnjeva (5-jako važno;1-potpuno nevažno), te stavovi potrošača o proizvodima od mesa. Sljedeća skupina pitanja se odnosila na povjerenje potrošača u uvoznu govedinu. Na kraju anketnog upitnika su prikupljeni podaci o sociodemografskim obilježjima ispitanika. Anketna upitnica je poslana na 1000 slučajno odabranih adresa u Pratu i Firenci (Toskana), a odaziv ispitanika je iznosio 19,5%. Za analizu podatka su korištene frekvencije i distribucija podataka, hi-kvadrat test, jednovarijantna analiza varijance, LSD (Fisher's LSD) i Games-Howell test.

Rezultati anketnog ispitivanja su pokazali da gotovo svi potrošači (98%) vole jesti meso. Gotovo polovica potrošača jede govedinu 2-3 puta tjedno. Statistička analiza je pokazala da su muškarci veći potrošači govedine od žena, te da stariji potrošači jedu govedinu češće nego mlađi potrošači. Većina ispitanika (oko 70%) kupuje govedinu u supermarketima ili u mesnicama (40%). Oko 30% ispitanika bi platili 10% veću cijenu za govedinu izvrsne kvalitete, dok bi oko 13% ispitanika platili i 20% veću cijenu za takvu govedinu.. Istraživanje je pokazalo da potrošači u Toskani pri kupnji mesa najveću pozornost pridaju roku trajanja (4,78), svježini mesa (4,76), okusu mesa (4,75), te oznaci kvalitete (4,59). Najmanje važna obilježja govedine su ekološka proizvodnja (3,46) te proizvodnja u vlastitoj regiji (3,24). Ispitanike ne zanima previše porijeklo mesa koje kupuju i samo oko jedne petine ispitanika je izjavilo da kupuju isključivo talijansko meso. Ipak, ispitanici imaju jasno izražene stavove prema mesu koje dolazi iz pojedinih zemalja. Tako više od polovice ispitanika ne bi kupovalo govedinu iz Velike Britanije, a oko 20% ispitanika iz Francuske. 12% ispitanika ne bi kupovali meso iz Hrvatske. Potrošači mesa iz Toskane smatraju da je važno da uvozno meso ima garanciju talijanske državne institucije. Navedeno istraživanje je pokazalo da usprkos nedavnim skandalima s hranom potrošači u Toskani još uvijek vole goveđe meso, te prema tome postoje dobre mogućnosti za prodaju tog mesa na navedenom tržištu.

INTRODUCTION

Due to the ongoing globalisation of international markets, meat has become a major product among all agricultural goods, with a very large of exchanges and high consumption rates all around the world (respectively 7% and 3% share of the world trade and world demand for agricultural products). However, while the general production of meat expanded at to 2,4% pace a year in the last seven years (boosted by the poultry sector), the bovine meat market remained stationary (+0,9% per year). Traditionally, in the international panorama, the main beef producers and consumers are the most industrialised countries, namely the United States and the European Union (21% and 13% of world market in 2001). But recently the increase of income in the developing Countries as well as recent trends in consumers' behaviour are changing production and demand patterns, so that by 2010 almost 80% of the ruminants is expected to be raised in the emerging regions of the world [4]. Despite the European Union as a whole shows high volumes of production and a positive trade balance (+159.000 tons in 2001), between the Member States there are very different self-sufficiency conditions: from 1025% in Ireland to 61% in Italy and as little as 28% in Greece [5]. At the same time one can notice quite different consumption behaviour from State to State, with the highest per capita consumption in France and Italy (25 and 22,4 kg per year) and the lowest levels in Germany and Spain (both nearly 13 kg per year). On the other hand the common feature of all European Countries is the decline of bovine demand (-8,7% between 1994 and 2001). This appears to be rather a structural change in the food consumption resulting from economic and social factors (Engel's law, new life-styles, education and age of the population, etc.) as well as health concerns [2]. In particular the two BSE scares in 1996 and 2000 compromised seriously consumers' confidence in bovine meat. Therefore consumers started to pay more and more attention to information, product quality and safety as main purchase criteria, rather than price. With particular reference to Italy, where bovine meat consumption is still quite high, it is possible to notice different attitudes in various regions of the Country; the highest meat and particularly beef consumption is characteristic for the central regions. The beef consumption in Tuscany in 1995 before the BSE crisis was 2 kg per capita per month while average Italian beef consumption was 1.7 kg. However, the reduction of the beef consumption in Tuscany, after the BSE crises emerged has been higher than the national average [3]. According to these information the beef consumers in Tuscany show to be very sensitive to market changes. Moreover consumers behaviour in Tuscany can be considered a sort of "intermediate" type of consumption between those of northern and southern Italian regions. For this reason the goal of this research is to study present purchase and consumption behaviour of Tuscany consumers with respect to beef and their attitudes towards imported beef.

METHODOLOGY AND RESEARCH PROCESS

The research process was made up of two parts: personal interviews and mail survey.

Three group interviews were carried out in May 2002 in the City of Bologna with 24 persons with different sex, age and educational level. The goal of the focus groups was to find out consumers attitudes about food in general, meat consumption and especially attitudes towards beef. The results of group interviews were used to create the main questionnaire.

The questionnaire consisted of a few question groups. In the first group, consumers were asked about their buying and consumption behaviour with respect to meat products, particularly beef. In the next section, respondents had to evaluate the importance of different factors taken into consideration when purchasing beef, such as: freshness, colour, appearance, guarantee of quality, brand, price. One group of questions consisted of statements used to measure consumer's attitudes towards meat production and its quality. The consumers had to express their agreement with the items on a 5-point scale from 1 = "I don't agree at all," to 5 = "I agree completely". A few questions in the questionnaire dealt with the consumer's trust in imported beef. Socio-demographic characteristics of respondents were collected at the end of the questionnaire.

The mail survey was carried out in June 2002 in Prato and Florence (Tuscany). The questionnaires were sent to 1,000 randomly selected persons whose addresses were taken from the Tuscany telephone book. Some questionnaires were sent by post and others were placed directly in personal post boxes of the randomly selected buyers. Together with the questionnaire, respondents received a preaddressed envelope in which they could return the completed questionnaire.

In a period of one month after the questionnaires were distributed, 195 completed questionnaires were returned (19.5%).

Descriptive statistics were used to describe the sample and to determine purchasing and consumption behaviour of the respondents. Further, respondents were grouped on the basis of frequency of usage, sex, age, socio-economic group and area of growing up. Chi-square and one-way analysis of variance were used to test the differences between different consumer groups. LSD (Fisher's LSD) and Games-Howell test were used for post hoc comparison. The level of comparison was set at < 0.05.

All statistical analyses were conducted using SPSS package.

The Sample

Of the total number of 195 respondents, 69% were from Florence and 31% from Prato. Statistical analysis (chi-square and ANOVA) showed that there were no differences between respondents from the two cities according to their purchasing or consumption behaviour.

More than half of all respondents were men (107 respondents) and 45% were women. The average age of respondents was 49,6 ±15.7 years. The distribution of respondents by age group was 19-25 years (5%); 26-40 years (32%); 41-55 years (25%); 56-65 years (19%), and over 65 years (19%). From the total number of respondents, 46% finished high school, 37% had a university degree, and 17% finished primary school. More than one third of the respondents were office workers, one fifth were pensioners, more than 10% of respondents had professional occupations. A major portion of the respondents (30%) lived in two-member families, a bit less in three-member families and ¼ had four-member families. Nine percent were single, and 10 respondents (5%) had 5 or 6 family members. Most of the respondents had yearly family incomes over 30.000 euro, and an equal number (30%) had family incomes lower than 20.000 euro or between 20.000 and 30.000 euro per year. Four fifths of the subjects grew up in cities. While almost two thirds visited the country at least once a month.

RESULTS

The following section outlines the results of the survey, and provides insight into consumers' buying behaviour, their attitudes about meat in general, and especially about beef. Selected results of the bivariate analysis of the demographic, socio-economic and usage subgroups are also included.

Buying and Consumption Behaviour

The results of the survey showed that almost all respondents (98%) like to eat meat. The most preferred meat among Tuscany consumers is chicken, followed by pork and beef. Testing the differences in consumption behaviour between consumers we found ($p = 0.034$) that men like to eat meat more than women. Forty-nine percent of male respondents like to eat meat very often, compared to 29% of female consumers. Data about meat consumed in the week prior to the survey showed that the preferences are in accordance with actual consumption.

Even though beef is not the most preferred meat, almost half of the respondents eat beef 2-3 times a week. However, 22% eat beef less than once a week or never. Similar to meat consumption in general, men eat beef more often than women; 86% of males eat beef at least once a week, compared to 71% of women. We didn't find any differences in preferences for a particular meat type between men and women.

There are differences according to the frequency of beef consumption between different age categories. Older people consume beef more often than younger consumers (Table 1).

Table 1 – Frequency of beef consumption according to consumers age ($p = 0.040$)

How often do you eat beef?	Average age	Std. Deviation
Every day	52.50	23.69
Once a week	50.95	15.55
Less than once a week	43.97	13.68

Fifty-eight percent of the subjects occasionally consume beef in restaurants, and 42% almost never eat beef outside their home. Even here we found that male consumers eat meat more often in restaurants than female consumers (69% and 48% respectively).

The great majority of the respondents (about 70%) are used to buy beef in supermarkets, or in butchers' shops (40%). The respondents buy beef very rare in small shops or directly from producers.

More than half of the consumers (56%) decide which meat type to buy while still at home, before going shopping. Younger respondents decide more often at the point of purchase what type they will buy compared to older buyers ($p = 0.006$). The average age of buyers that decide what to buy at the point of sale is 46 ± 14 years; and, the average age of those that make buying decisions while still at home is 53 ± 16 years. Further, university educated people and those with higher incomes usually decide what meat to buy at the point of purchase rather than at home.

Most of the respondents are not willing to pay premium prices for beef of higher quality. About 30% of respondents would pay 10% more than standard price, and 13% are ready to pay an even 20% higher price for extra quality beef.

The frequency of beef consumption does not affect the willingness to pay a higher price for extra quality beef, but respondent's age and education do. Younger buyers and those with higher education are willing to pay more for the extra quality beef.

Purchase Criteria

In this section of the questionnaire respondents were asked to indicate the importance of specific factors on their purchasing decision. Table 2 shows the mean scores for the eleven factors presented.

The most important beef characteristics for the Tuscany consumers are the expiration date, freshness, and taste of the meat; followed by the presence of a quality warranty. The least important characteristics are that meat be organically produced or produced in their own region (Table 1).

Different consumer groups were examined on the basis of the socio-demographic characteristics of the consumers. No differences were found between men and women, nor did the age of the respondents influence the importance of meat characteristics.

However, we found that the education level influenced the importance of the beef price. Less educated people put more importance on beef price than people with higher education.

Another difference was found between people who had grown up in cities and those who had grown up in the country. "Rural" people had more appreciation for beef produced in their own region than did "urban" consumers.

In table 3 are presented the average evaluations of attitudinal-type statements about different meat types, meat origin and about trust in selling channels.

The results showed that people have rather positive attitudes towards white meat and they are used to buy it. Moreover, almost 40% of respondents agree to be afraid to eat red meat. As it can be seen from table 3 the consumers again showed not to be very concerned about meat origin and only about one fifth of the respondents stated to buy only Italian meat. However, more than a half of the respondents trust better butchers than state and they prefer to buy meat in local butchers shops that they trust in.

Attitudes towards imported beef

Even if respondents didn't consider the country of origin of the animals as important as other characteristics, they had strong preferences about beef they would never eat. More than 55% of the respondents would never eat beef from England, and 20% would not eat French meat. Beef from other EU countries is accepted quite well. Regarding beef from central and south-east Europe, consumers preferred meat from Croatia (only 12% indicated they would not eat that meat), followed by Hungary (14%) and Slovenia (15%). Outside Europe, the respondents showed trust in beef from Argentina (only 7% of respondents would not eat that meat).

The most important guarantee of quality for imported meat is the certificate of quality of Italian public institutions (80% of respondents), while about half of the respondents consider the guarantee of quality stated by the country of origin to be very important. One fourth of respondents would prefer that imported beef have a guarantee of quality from private Italian institutions.

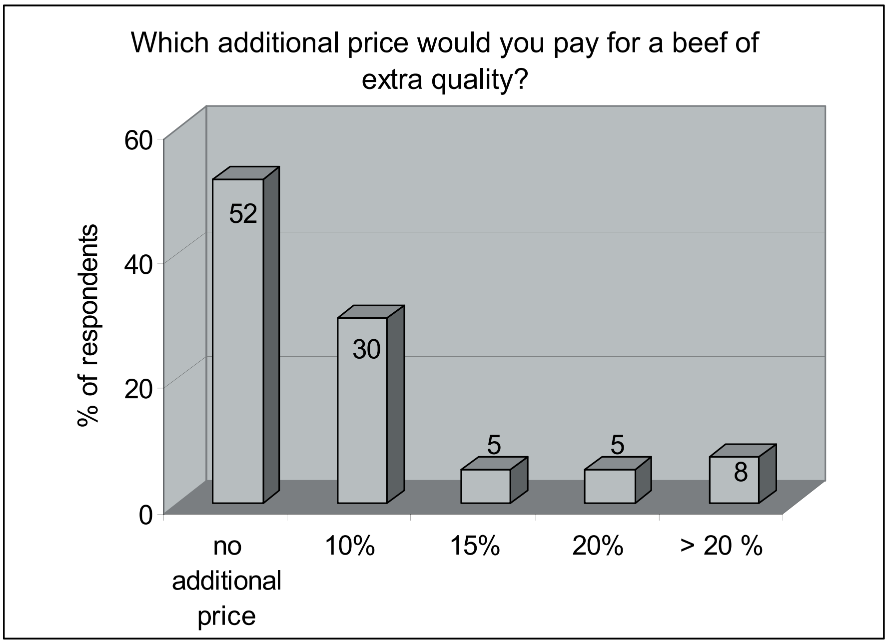

Figure 1: Willingness to pay additional price for extra quality beef

Table 2: Perceived importance of beef characteristics (5 – very important, 1- not important at all) taken into consideration when purchasing beef

Characteristics	Mean	Std. Deviation
Expiration date	4.78	.61
Freshness	4.76	.57
Taste	4.75	.61
Guarantee of quality	4.59	.80
Appearance	4.41	.78
Colour	4.35	.76
Country of origin	3.82	1.17
Price	3.74	1.02
Brand	3.48	1.09
Organic production	3.46	1.19
Product from own region	3.24	1.21

Table 3: Consumer reaction to attitudinal-type statements (from 1 = "I don't agree at all," to 5 = "I agree completely")

	N	Mean	Std. Deviation
I trust more in my butcher than in any state control	172	3.63	1.28
We started to buy white meat because of fear and now we are used to it	176	3.59	1.25
White meat is more tasty and more healthy	183	3.45	1.21
I think I know how our farmers produce meat	178	3.42	1.12
I only buy meat from the butcher's shop I trust in	178	3.14	1.38
People are afraid to eat any red meat	181	3.09	1.21
The media overreacted to the BSE stories	184	3.08	1.48
Elderly people should not eat a lot of red meat	183	2.74	1.28
I don't trust imported meat	176	2.64	1.23
Meat from our region is the best	188	2.53	1.13
I only buy Italian meat	183	2.52	1.26
I like to know how the animals are raised	175	2.31	1.27
I like to know the origin of the meat	178	2.07	1.16
If the meat is dark and not cut well, I don't buy it	172	1.85	1.09

CONCLUSIONS

Beef is not the most preferred meat among Tuscany consumers, but there is still a large number of consumers that eat beef 2-3 times a week. The results of the study showed that men and older consumers have stronger preferences towards beef compared to younger consumer and women. However, younger consumers are more willing to pay higher price for extra quality beef.

The findings of the importance of different purchase criteria showed that expiration date, freshness, and taste are most important when purchasing beef. These findings are consistent with the results found in earlier studies [6].

Meat production in the consumer's own region and organic production were found to be the least important purchase criteria, this result was confirmed in other studies too [1]. However, we found that consumers grown up in rural areas appreciate more the beef produced in their own region than "urban" consumers do.

In conclusion, the survey showed that despite recent food scares and new consumption behaviour, consumers in Tuscany still like beef and there are good opportunities for beef producers (from Italy or other countries), if they will provide good quality beef and more information to consumers.

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